A Survey of an Adult Learner

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Compare and Contrast Learning Theories

The purpose of any model is to describe, or simulate to some degree, some aspect of a reality so that we can more readily understand and discuss that reality. A water pump can be used to model certain aspects of the heart, a living organism can be used to model a complex social system, or a computer may be used to model cognitive processes. Depending on the symbols used to describe the analog, and on the complexity of the model, a varying degree of accuracy and completeness may be achieved by the model. By definition however, any model will be incomplete and approximal because it can not represent the subject exactly in all its subtleties and because all of the aspects of the subject can not be represented. As William Ickes put it: "If a model exactly and completely describes a reality in every respect, it would then become that reality."

A number of models may be employed to describe and predict human learning behavior with varying levels of success depending on the learning situation. They tend to fall into two groups depending on your perspective regarding locus of control. If the perspective is with the learner the most appropriate model would likely be one of the cognitive based theories. If on the other hand, the perspective is with the instructor, the appropriate model would tend to be behaviorally based.

Consider the following scenario:

> *Jose Soplar is a returning adult basic education student. When he began, he was told that he would have to perform on numerous standardized tests. Successful performance on these tests indicate if facts and information have been remembered and when Jose can move on to the next level. When Jose started taking the tests, he would make pretty patterns on the answer sheet, look around the room at other people and in general did poorly on the tests. Jose began trying other things. He would talk to other students to see why they were doing so much better, write notes to himself and create charts and graphs. He read the test subject several times and made outlines of the major ideas. With practice, Jose got much better at taking standardized tests and consistently made high scores.*

This scenario represents a collection of events. To describe the events in such a way that the scenario "makes sense," and so that we might predict the outcomes of future similar events, we need to apply a theoretical model. The choice of model will create a perspective by which we can frame our description of reality and organize our understanding.

Behaviorism

The behaviorist perspective regards learning in terms of what can be objectively observed and measured. Skinner said that behavior is the basic subject matter of psychology, and Watson believed that psychology should concern itself only with objectively observable data (Driscoll, 1994, p.28). Comparing behaviorism to the cognitive theories, Watson viewed the study of consciousness and the mental states as lacking reliable indicators to measure the phenomena.

Applying the behaviorist theories to the above scenario, Skinner would say that Jose's learning was an example of "functional relationships between environmental cues and behavior" (Driscoll, 1994, p.29). Learning happens only in terms of what is observed, outside the learner, in the form of stimulus and response. There is the discriminative stimulus of tests being presented, Jose's operant behavior towards those tests, and the contingent stimulus that is the result of Jose's performance. Jose's behavior is thus shaped into what the instructor considers to be a more "correct" test taking behavior through successive trials of S-R-S conditioning. Things like interacting with other people or making pictures and graphs would be treated as confounds or ignored as random behaviors and extraneous environmental stimuli, but in any case, not relevant to the learning.

Cognitivism

The cognitivist assumes that learning occurs within the learner, at a cognitive level, and may or may not involve behavior. According to Bruner, information equals learning so outward appearances to that effect are merely communications illuminating the result of learning rather than learning itself. Like the behaviorist, the cognitivist seeks to explain how the environment modifies human behavior. Unlike the behaviorist however, the cognitivist assumes that something else is going on in what is called the information processing system (Driscoll, 1994, p.68). The mind is the locale of the learning process and that is the major area of interest.

Even though the scenario above describes Jose's situation from an outside observer's perspective, the cognitive model would focus on the processing that goes on inside Jose's head and the inferences that can be made from observations. To the cognitivist, the pictures and graphs that Jose made would be clues to the kind of schemes he used to process information. Re-reading material becomes rehearsal, and outlines give indications to the encoding necessary for cognitive learning to take place.

Social Learning

As in the behaviorism perspective, reinforcement and shaping of responses are important factors in social learning, and like cognitivism, the learner actively adds something to the process. To the social learning theorist, this "something" is hypothesized to be the existence of a "mediating response" (Glover & Bruning, 1990, p.303). Gagne's nine events of instruction illustrate the mix of behavior and cognition found in social learning. Gaining attention, providing stimulus and feedback, and assessing performance provide examples of the behavioral side of social learning theory, but over-viewing, prior learning, retention and transfer show indications to social learning's cognitive ties. In addition, social learning includes observation and imitation (guidance in Gagne's list) in the learning process. Bandura suggested

that observing reinforcement or punishment establishes the relative value of consequences making direct reinforcement or punishment unnecessary for learning to occur.

The social learning theorist would recognize the presence of behavioral shaping in Jose's situation and also the cognitive perspective of a mediating response in Jose's information processing. In addition, social learning would recognize the modeling value of Jose's interaction with other successful students. Bandura might even interview Jose to find out at what point he realized that he could do well on tests.

Humanism

Even though humanism is more an approach than a theory, the positions and implications of this perspective are pervasive and have definite impact on learning. As far as respecting the individual and empowering the learner, it is a long way from the behaviorist's "learner as laboratory-subject" approach. The work of Knowles, Rogers and Maslow recognize and respect the learner as a self-directed, self-actualized and active participant who learns through a series of interpersonal relationships and will not learn if she does not want to.

The humanist would look at Jose—the person—and discuss his interpersonal relations with the other students, his self-directed approach of study techniques and his motivation toward actualizing his goals.

Constructivism

Constructivism takes the idea of interconnectedness between learner and environment to its logical limits. Here the idea is that the environment influences internal processes but at the same time, those same internal processes influence the environment. (I think of it as the Schrödinger's Cat approach to learning.) As a result, we create knowledge in our own heads and that created knowledge may be interpreted differently by each of us. Although Piaget called his view genetic epistemology, he also called his view Constructivism, because he firmly believed that knowledge acquisition is a process of continuous self-construction (Driscoll 1994, p.171).

The constructivist view of Jose's situation would focus on the creation of new realities as he interacted with the people and things in his environment.

An Adult Learning View

Individuals learn through experiences, whether intentional or incidental; formal or informal. Learning is a naturally occurring process throughout the individual's life. Each and every adult learner is unique, with a distinctive set of; experiences, cultural perspectives, influences, styles of learning and motivations. When the individual's learning characteristics are recognized and respected, the natural abilities of the individual can be employed to enhance the learning experience.

Adults are natural learners, and sometimes a better teaching strategy involves awareness, on the part of the instructor, of what is being learned rather than dictating the instructor's agenda. This approach addresses the self-directedness of the learner and would be more appropriate where the ownership of learning is with the learner. By contrast, if ownership of the learning is with a boss for example, and the learner is an employee, instruction is proscribed by the employer and the results of the learning are used by the employer. In that case, a certain amount of control will be maintained by the boss and an approach involving more pedagogical aspects might be more appropriate.

Learners are individuals. What works for one learner may not work well, if at all, for another and the instructor must be aware and receptive to the learner's needs. The implication here is that communication flow is more learner-to-instructor than in the more pedagogical styles.

Learning theories should not be thought of as exclusively for adults. Rather, when talents, skills, level of development, styles, and characteristics of the learner are recognized and employed in the learning exercise, then learning can naturally take place. Whether the learner is adult or child, impaired or gifted, the process is the same because the instructor is continually adapting to the situation.

This is an admittedly utopian ideal because it suggests that complete individualized learning packages are tailor made for each subject and for each learner. Realistically, the spirit of the theory can be utilized to an appropriate level wherever time and resources are available.

References

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